

From wang!elf.wang.com!ucsd.edu!info-hams-relay Sat Mar 23 04:20:47 1991 remote  
from tosspot  
Received: by tosspot (1.63/waf)  
via UUCP; Sat, 23 Mar 91 09:47:17 EST  
for lee  
Received: from somewhere by elf.wang.com id aa06969; Sat, 23 Mar 91 4:20:45 GMT  
Received: from ucsd.edu by relay1.UU.NET with SMTP  
(5.61/UUNET-shadow-mx) id AA05550; Fri, 22 Mar 91 21:51:38 -0500  
Received: by ucsd.edu; id AA05553  
sendmail 5.64/UCSD-2.1-sun  
Fri, 22 Mar 91 13:14:18 -0800 for brian  
Received: by ucsd.edu; id AA05446  
sendmail 5.64/UCSD-2.1-sun  
Fri, 22 Mar 91 13:13:50 -0800 for /usr/lib/sendmail -oc -odb -oQ/var/spool/  
lqueue -oi -finfo-hams-relay info-hams-list  
Message-Id: <9103222113.AA05446@ucsd.edu>  
Date: Fri, 22 Mar 91 13:13:49 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams-relay@ucsd.edu>  
Reply-To: Info-Hams@ucsd.edu  
Subject: Info-Hams Digest V91 #224  
To: Info-Hams@ucsd.edu

Info-Hams Digest                      Fri, 22 Mar 91                      Volume 91 : Issue 224

Today's Topics:

Anybody out there ever fixed a microwave oven (2 msgs)  
Balloon Antennas (2 msgs)  
Fun with Balloons and long wires!  
Hints & Kinks for taking the General code test  
MAJOR SOLAR FLARE ALERT - 20 MARCH  
Monthly On-Line Elmers Resource Directory  
Power Supply Design Question  
Propagation Bull. #8, 3/9/91  
RFD (Request For Discussion) - Veterans Issues group  
SOLAR TERRESTRIAL BULLETIN - WARNING UPDATES - 17 MARCH  
upgrade from no-code tech

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

-----  
Date: 19 Mar 91 16:59:42 GMT  
From: tut.cis.ohio-state.edu!pacific.mps.ohio-state.edu!zaphod.mps.ohio-state.edu!  
sdd.hp.com!spool.mu.edu!news.nd.edu!mentor.cc.purdue.edu!noose.ecn.purdue.edu!  
eg.ecn.purdue.edu!young@ucbvax  
Subject: Anybody out there ever fixed a microwave oven  
To: info-hams@ucsd.edu

Yeah, I fixed a microwave once. It was a Sears, and the power transformer had gone short. Sears gave me a \*very\* hard time when I tried to buy a replacement! I had to sign a release that I wouldn't hold them responsible if I got hurt while repairing the thing. Very strange. Anyway, I swapped in the transformer and fired it up, everything was peachy. My conclusion is that if you know how to work on 2KW linears and have the proper respect for HV and RF, working on microwave ovens shouldn't be a challenge.

Having said that, beware that if the containment (door seal, cooking chamber, etc.) is in any way involved with the repair, find/borrow/buy a survey meter and use it after you're finished, to make sure things don't leak. If this happens to be an oven that others might use besides you, I'd call this mandatory. Could be a sticky liability point later on.

73s, and good luck

Mike Young KA9HZE	young@ecn.purdue.edu	
Purdue University EE Dept.	...!pur-ee!young	
W. Lafayette, IN 47907		

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Mike Young KA9HZE	young@ecn.purdue.edu	
Purdue University EE Dept.	...!pur-ee!young	
W. Lafayette, IN 47907		

-----  
Date: 18 Mar 91 16:51:40 GMT  
From: swrinde!zaphod.mps.ohio-state.edu!magnus.acs.ohio-state.edu!csn!  
chuck@ucsd.edu  
Subject: Anybody out there ever fixed a microwave oven  
To: info-hams@ucsd.edu

There is no newsgroup that specifically suits itself to this flavor of question, so if you feel this question is out of place, please hit the 'n' key so that only one of us wastes bandwidth in an inappropriate place.

Now then, if you are still reading I have a question about microwave ovens.

Through pilot error I managed to run a microwave oven at full power for 70 minutes with nothing in it. It having nothing else to cook, cooked itself.

I have serviced a lot of electronic equipment, amplifiers, tuners, tv's, etc. but never a microwave.

There is apparently a magnetron and a power supply, the magnetron has two wires attached to it, it is a sealed unit. I have to assume that the oscillator is inside the sealed unit.

Does anybody know if the magnetron is the most likely point of failure, or is the supply? Can I use a volt meter to measure the voltage from the power supply? Should I disconnect the supply from the magnetron before measuring the supply? If I disconnect the supply, should I provide a dummy load? Any other suggestions?

The microwave is a sharp convection/microwave it is about two to three years old, I could provide an exact model if needed (I don't know it off hand).

Does sams provide photofact folders on microwaves? Does the manufacturer put service manuals in the hands of mere mortals.

I have a hard time believing that some sensible precautions, wouldn't reduce this to a fairly safe activity, but maybe you know otherwise.

Any info on this is greatly appreciated, reply by mail and I'll post a summary if there is sufficient interest, and somebody can suggest the most appropriate newsgroup for this line of discussion.

Chuck Luciano  
303-421-9113  
chuck@csn.org

Disclaimer: Don't try this at home kids, we're professionals here.

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Wow a .sig, I never had a .sig before.

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Date: 15 Mar 91 15:30:38 GMT  
From: hpfcso!jayk@hplabs.hpl.hp.com  
Subject: Balloon Antennas  
To: info-hams@ucsd.edu

I hope someone can come up with a successful balloon story because this is another horror story:

A couple of ham buddies and I spent a month in 1986? on St. Kitts (V4 ex VP2K) with the main purpose of operating the ARRL DX Contest. We rented two small cottages on the beach, about one and a half miles straight off the end of the runway at the airport. Boy were those DC-8s noisy when they went over at several hundred feet. We took along a 6 foot diameter balloon to put up our killer 160 meter quarter wave vertical. We spent the better part of a day trying to find a bottle of helium, then paid an arm and a leg for it. We floated up the wire vertical the next day, in a ~15 mph wind, which always blows in off the ocean. Used two small nylon ropes on the windward side to keep the balloon centered over the base point of the antenna. About an hour after is was up (while we sat and admired our work) two offical looking cars pull up and several uniformed guys get out. They walk around some, keep pointing at the balloon, walk around, etc. They never come up and talk to us, finally after about 15 minutes the leave. Sigh of relief, we were kind of close to the airport. So night falls and its time to test the antenna. Get on just after dark and get good signal reports from the east coast, and haven't turned on the amp yet. Clean up the shack a bit, eat dinner, and go back to try 160 with the amp on. Start to tune up the amp, SWR is terrible. Look outside, with flashligh, and the balloon has lost half its height. We take it down, in the dark with now even more wind, to discover that wind driven sand? has made quit a number of small holes which are now growing. We finally get the balloon deflated in all that wind. Rather depressed we sat down, had a few beers, and used the rest of the helium to make our voices sound like Mickey Mouse.

Jay K0GU

-----  
Date: 14 Mar 91 19:01:44 GMT  
From: swrinde!zaphod.mps.ohio-state.edu!magnus.acs.ohio-state.edu!  
rdixon@magnus.ircc.ohio-state.edu@ucsd.edu  
Subject: Balloon Antennas  
To: info-hams@ucsd.edu

I have been involved in a number of balloon-supported activities.

Here are the basic problems which have ALWAYS occurred:

1. Wind problems. Balloons have large surface areas, and hence any wind will blow them off to the side, making the antenna be non-vertical. If the balloon has enough lift, you can use a separate guy line on the upwind side, positioned so as to keep the antenna vertical above the desired spot. But the wind will shift direction and speed, making constant readjustment needed.

2. Break-loose problems. Strange as it may seem, every balloon we have ever used, despite past experience and all attempts to prevent it, has ultimately broken loose and floated away carrying the antenna wire. This inevitably happens in the wee hours of the morning when everyone is half asleep and it is so dark you can't see the balloon and antenna anyway. I suspect there are balloon gremlins that wander the earth just to do this to us. The symptom is that the receiver suddenly stops hearing any signals. The operator, being sleepy, takes a few minutes to realize that the band did not fade out, or the rig fail etc. Inspection by flashlight then reveals the departure of the balloon. We have also used what are called Kiteoons, with the same result. Perhaps the twisting of the wire causes this. We even put labels on the balloons in later attempts, asking that anyone who finds it please let us know. Nobody ever did.

These were all helium-filled balloons of various kinds and sizes. If it is windy and there are objects around, don't even try to launch. Trees and other antennas are deadly to balloons. WE once managed to expertly impale the balloon on a 40-meter vertical that happened to be nearby.

Electrically, the balloon antennas work like gangbusters. On 160 meters you can dominate the band. You will need good ground radials and an antenna tuner located right at the base. Good luck!

Bob W8ERD

-----  
Date: 16 Mar 91 00:55:20 GMT  
From: swrinde!zaphod.mps.ohio-state.edu!ub!acsu.buffalo.edu@ucsd.edu  
Subject: Fun with Balloons and long wires!  
To: info-hams@ucsd.edu

In article <1991Mar15.142819.27929@uokmax.ecn.uoknor.edu>  
skaggs@nsslsun.gcn.uoknor.edu (Gary Skaggs) writes:  
>In article <19630@brahms.udel.edu> moyer@brahms.udel.edu (Eric Moyer) writes:  
>>  
>> I'm with the University of Delaware ARA and we're thinking about putting  
>>a huge long wire antenna onto the end of a balloon and floating it up  
>>above the shack. We'll probably use good 'ol 22 gauge magnet wire, so  
>>the weight won't be all that great, but I haven't calculated it yet. I'd  
>  
>Eric, for field day a few years ago, our club used 500 ft. of insulated, number  
>20 stainless steel wire (I know, I know, but we had it, OK?) and 5 ft.  
>diameter when inflated advertising balloons. One shot in the morning and  
>a brief top-up during the heat of the day kept these in the air through  
>the entire field day period. Signal reports were great. Winds were

>mercifully light that year...

...and if they aren't light, try a medium sized box kite. A parafoil would have even better lifting power, and fly at a higher angle. Even if the winds are light a decent-sized delta kite should heft a good amount of wire. You could even dangle the wire under the kite so it'd be more nearly vertical (if the winds are steady).

Of course, the usual prohibitions against flying kites near power lines are infinitely more important when you have a wire involved, and I don't know that I'd trust a wire to hold a big kite down, you'd probably need a separate flying line as well. But kites are reusable (you can even fly them without antennas!) and you can pretend you're Marconi :)

Bill.

Bill Owens  
108 Computing Center  
Buffalo, NY 12460

owens@acsu.buffalo.edu  
uunet!acsu.buffalo.edu!owens  
716/636-3511

-----  
Date: 19 Mar 91 02:04:10 GMT  
From: pyramid!infmtx!randall@hplabs.hpl.hp.com  
Subject: Hints & Kinks for taking the General code test  
To: info-hams@ucsd.edu

In article <1991Mar14.224017.6341@mentorg.com> mrosneck@mentorg.com (Mark Rosneck) writes:

>My father is going to (finally) upgrade to General. I understand how  
>the new volunteer examiner system works but I'm not sure how the code  
>tests are actually structured these days. The last time I took a code  
>test I got to sit in front of the FCC and sweat a lot.

>  
>What sort of a test should he expect? How is it graded? Is a sending  
>test still required? Are there any hints for taking the test?

>  
>I believe there was a thread on this a few months ago. I'd appreciate  
>it if someone could summarize the comments for me.  
>

Call your local VEC. Tests differ from one location to another.

Generally, he will enter a room and be asked to put on a pair of headphones. There is a warm-up period of five minutes or so where code is sent at the same speed as the test. Then the guy announces that the test will begin, you hear a series of "V"s , and the 5-minute

test starts. After the test, you are given a 10-minute written exam with questions like:

KK6MY DE ...

- A) WA6OIP
- B) WA7OIP
- C) WA6GIP
- D) WA7GSP

RST ...

- A) 559
- B) 459
- C) 599
- D) 589

There will probably be NO sending test.

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-----  
Randall Rhea  
Senior Programmer/Analyst, MIS

Informix Software, Inc.  
uunet!pyramid!infmx!randall

-----  
Date: 20 Mar 91 23:54:02 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: MAJOR SOLAR FLARE ALERT - 20 MARCH  
To: info-hams@ucsd.edu

-- MAJOR SOLAR FLARE ALERT --

MARCH 19, 1991

Flare Event Summary  
Potential Impact Assessment

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#### MAJOR ENERGETIC EVENT SUMMARY

Region 6555 spawned a major class M7.0/1F flare at 06:16 UT on 20

March. The event began at 05:26 UT, peaked at 06:16 UT and ended at 06:18 UT on 20 March. The event occurred at a location of S25E50. There were no radio signatures observed with this event. No sweeps were observed either.

Region 6555 appears quite formidable in white and H-alpha light. It is an impressive region to see, and contains a very large penumbral area with large spots encompassed within the penumbra.

#### POTENTIAL TERRESTRIAL IMPACT ASSESSMENT

This major class M7.0/1F flare will not have a terrestrial impact. It was radio-quiet and was rather weak as far as major flares go.

Region 6555 has the potential to produce major flaring. Minor M-class flaring will certainly be observed from this region over the coming week, probably intermixed with occasional isolated major flares.

Region 6545 has decayed to the point now where major flaring is not likely to be observed. Minor M-class flaring could continue, but major flaring is no longer a real threat from this region.

A bulletin will be released near 06:00 UT on 21 March to reflect the decreased flare probabilities and update the warnings.

\*\* End of Alert \*\*

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Date: 15 Mar 91 18:16:15 GMT

From: swrinde!zaphod.mps.ohio-state.edu!caen!kuhub.cc.ukans.edu!zeus.unomaha.edu!  
acmnews@ucsd.edu

Subject: Monthly On-Line Elmers Resource Directory

To: info-hams@ucsd.edu

As part of the multi-pronged strategy of Project SAVE THE BANDWIDTH, I will now put out a call for On-Line Elmers. These are people, who by virtue of skill and knowledge in an area of expertise in ham radio, are willing to field E-mail by readers of the rec.radio.\* groups.

Volunteers need only send me their name, E-mail address, and area of expertise. "Generalists" or "Miscellaneous" Elmers are also quite welcome. Naturally, the more that volunteer, the more the work is distributed. If upon volunteering, you are unable to meet your obligations, simply write to me and I will remove your name from the list. I could also add that because of "personal commitments" or "career broadening" you no longer are available to Elmer on a regular



basis.

I will be the point-of-contact for this project. I will maintain the list, post it to the groups at least monthly, and have the latest copy placed in the supplemental archives at ftp.cs.buffalo.edu in subdirectory pub/ham-radio.

Here is the latest version of the list. If you sent me mail and are not on it, please resend as it may have been lost on the way or once it reached my host.

73, Paul, KD3FU

ACMNEWS@zeus.unomaha.edu uunet!unocss!zeus!acmnews 137.48.1.1

ps67@umail.umd.edu uunet!mimsy!umail!ps67 128.8.10.28

ON-LINE Elmers Resource Directory (as of 03/15/91)

-----  
Dan Halbert, KB1RT  
QTH is West Newton, MA, near Boston.

halbert@crl.dec.com

Building homebrew QRP gear, Advice on simple antennas

-----  
Paul W. Schleck, KD3FU

acmnews@zeus.unomaha.edu  
ps67@umail.umd.edu

Miscellaneous, Internet, College Clubs

-----  
Mike Waters AA4MW/7

waters@nddsun1.sps.mot.com

Miscellaneous

Date: 18 Mar 91 20:33:29 GMT  
From: hpl-opus!hpnmdla!alanb@hplabs.hpl.hp.com  
Subject: Power Supply Design Question  
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, kipper@ccwf.cc.utexas.edu (Kip Ingram) writes:

>Hi. I have a question about power supply design. I bought a 55 volt, 2 amp  
>(both rms values) transformer with the intent of building a supply that could  
>deliver 80 watts or so. However, I've become concerned about heating in the  
>transformer. Because the rectifier/filter capacitor pair only draw current  
>from the transformer for a brief period each half cycle, the  $RI^2$  heating  
>is higher than it would be for an equal current flow under continuous duty.  
>I see three options:

- > 1. Let the transformer run hot
- > 2. Back off on my power supply requirements. I think I can get  
> 60 volts at 0.7 amps without too much trouble. 40 watts rather  
> than 80.
- > 3. Use a choke input filter rather than a capacitor input filter.  
> This will lower the DC voltage somewhat, but it's plenty high  
> anyway.

>Any advice out there? Has anyone consistently driven transformers beyond  
>their ratings? I'm sure there's a safety margin built in, but have no idea  
>how large it is.

If the transformer is rated for a resistive load, then yes, indeed, you  
have to derate it for capacitive-input filters. A factor of 2 sounds like  
a reasonable derating factor, especially if the duty factor is less than 100%.

A choke-input filter should smooth out the current peaks, so you can use  
the RMS power rating.

Transformers have very long thermal time constants. If you are using  
only a 50% duty cycle, you can run higher power. Assuming no core  
saturation, you should be able to run 1.4 times the current, so that  
 $I^2 R$  is 2 times, for 1/2 the time.

AL N1AL

-----  
Date: 14 Mar 91 01:33:47 GMT  
From: gatech!usenet.ins.cwru.edu!mcs.kent.edu!VAX1.CC.UAKRON.EDU!tut.cis.ohio-  
state.edu!n8emr!gws@ucsd.edu  
Subject: Propagation Bull. #8, 3/9/91

To: info-hams@ucsd.edu

=====  
| Relayed from packet radio via |  
| N8EMR's Ham BBS, 614-895-2553 1200/2400/9600/V.32/PEP/MNP5 |  
=====

SB ARRL @ ALLBBS \$ARLP008  
Propagation Bull. #8, 3/9/91

QST DE W1AW  
PROPAGATION FORECAST BULLETIN 8 ARLP008  
FROM TAD COOK, KT7H  
SEATTLE, WA MARCH 9, 1991  
TO ALL RADIO AMATEURS

Last week we reported the return of an active region to the visible surface of the sun, and its effects on HF propagation. With the passing of this region, the forecast at that time was for stable conditions and very little chance of solar flares, which turned out to be wrong.

Instead, the Sun gave us quite a bit of flare activity, especially on March 5th. By the middle of that day local time, major flares were observed at 0009, 0312, 0512, 0914 and 1721 UTC. This resulted in a number of sudden fades in HF radio propagation. Since then, the solar activity has been high to very high, with geomagnetic conditions unsettled to active.

For the forecast week, look for solar activity to increase from moderate to high levels, with geomagnetic conditions mostly unsettled. The predicted 10.7 cm flux and planetary A index values for March 9 through 15 are 230/18, 235/15, 240/15, 250/15, 260/15, 270/10 and 280/10. We could see more solar flare activity, but the high A index values for this week are predicted due to the presence of a large coronal hole on the surface of the Sun, and not from any solar flares.

American sunspot numbers for February 28 through March 6 were 89, 96, 77, 52, 59, 71 and 97 respectively, with a mean figure of 77.3.

Copied from W1AW by Tad, KT7H @ N7ENT.#WWA.WA.USA.NA.  
/EX

--

Gary W. Sanders (gws@n8emr or ...!osu-cis!n8emr!gws), 72277,1325  
N8EMR @ W8CQK (ip addr) 44.70.0.1 [Ohio AMPR address coordinator]  
HAM BBS (1200/2400/9600/V.32/PEP/MNP=L5) 614-895-2553  
Voice: 614-895-2552 (eves/weekends)

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Date: 15 Mar 91 19:48:40 GMT  
From: swrinde!zaphod.mps.ohio-state.edu!unix.cis.pitt.edu!gvlf3.gvl.unisys.com!  
gvlf8-e!markw@ucsd.edu  
Subject: RFD (Request For Discussion) - Veterans Issues group  
To: info-hams@ucsd.edu

In article <1991Mar15.142558.11305@news.gvl.unisys.com> markw@gvlf8-  
e.gvl.unisys.com (Mark H. Weber) writes:  
>In article <CMM.0.90.2.669045114.arnie@magnus.acs.ohio-state.edu>  
arnie@magnus.acs.ohio-state.edu (Arnie Skurow) writes:  
>>  
>>I'm proposing a new newsboard entitled Alt.Veterans.Issues.  
>  
>How about "soc.veterans.issues"? I'd be willing to run the vote for it.

After I posted this in alt.config, I was reminded (via email) that there is  
an ongoing discussion in news.groups for a veterans' issues group. Here's an  
excerpt from the original posting:

>Newsgroups: news.announce.newgroups,news.groups  
>From: Larry W. Jewell, USN Ret. <JEWELLLW@vm.cc.purdue.edu>  
>Subject: CFD: talk.veterans  
>Date: 9 Mar 91 06:30:14 GMT  
>Approved: tale@rpi.edu  
>  
> I would like to propose "talk.veterans" as an unmoderated  
>group.  
> Veterans have concerns, problems, and needs which are  
>common to many of us, and knowing how someone else handled a  
>situation could provide needed help in our own case.  
> I see this group as being a place where we could trade  
>information on the DVA, reunions, common causes, and resources  
>that just don't get the widespread dissemination required to  
>reach the veteran community as a whole.

I think that a veterans group deserves a better home and wider distribution  
than a "talk" or an "alt" group would get. "Soc" is probably the appropriate  
place for this. Why not call it "soc.veterans.issues" or just "soc.veterans"?

Note that followups have been directed to news.groups, which is the usual  
place for new mainstream group discussions.

--

Mark H. Weber	Internet: markw@GVL.Unisys.COM
Unisys - Great Valley Labs	UUCP: ...!uunet!cbmvax!gvlv2!markw

Paoli, PA USA (215) 648-7111 |

-----  
Date: 17 Mar 91 08:35:45 GMT  
From: HG.ULeth.CA!oler@ucbvax.berkeley.edu  
Subject: SOLAR TERRESTRIAL BULLETIN - WARNING UPDATES - 17 MARCH  
To: info-hams@ucsd.edu

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## SOLAR TERRESTRIAL BULLETIN

17 March, 1991

### Terrestrial Geophysical Warning Updates

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#### UPDATED WARNING INFORMATION

An interplanetary shock has failed to arrive as was originally anticipated for 15 and 16 March. A slight increase in geomagnetic activity has been observed over the past several hours, but no significant shocks or other anomalies have been observed. The flare-related shock appears to have missed the earth altogether.

Given the amount of uncertainty regarding potential geomagnetic impacts from the recent major flaring, the decision has been made to maintain the POTENTIAL GEOMAGNETIC STORM WARNING through to at least 19 March. The potential for a flare-induced increase in geomagnetic activity is presently considered to be fairly small, but is high enough to warrant continuation of the warning. High latitude minor geomagnetic storming is expected over the next three days at least. Whether conditions will intensify to encompass the middle latitudes is still an open question. We see no reason to expect major geomagnetic storming at the present time.

The following warnings remain in effect:

- POTENTIAL GEOMAGNETIC STORM WARNING (for 17, 18 and 19 March)
- POTENTIAL SATELLITE PROTON EVENT WARNING
- POTENTIAL PCA (POLAR CAP ABSORPTION) EVENT WARNING

If conditions change radically, an additional bulletin will be posted. Degradation of HF signal propagation over the high and polar latitude signal paths is expected to begin at any time. Some middle and lower latitude signal degradation is expected for 18 and possibly 19 March.

\*\* End of Bulletin \*\*

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Date: 18 Mar 91 20:36:05 GMT  
From: sdd.hp.com!spool.mu.edu!news.nd.edu!mentor.cc.purdue.edu!mace.cc.purdue.edu!  
dil@ucsd.edu  
Subject: upgrade from no-code tech  
To: info-hams@ucsd.edu

In article <2640@cruzio.UUCP>, brettb@cruzio.UUCP (Brett Breitweiser) writes:  
>

> Query is: should I learn code at 5wpm (I know the dit-dah combos but  
> need to develop "my ear") or should I just go straight to 13 wpm and  
> the general test? Seems like I could and should just develop my ear at

In response to two related questions, I decided to post this.

I have Morse Tutor for the IBM PC. I found it on a bulletin board several years ago; it should be available from the ARRL. I could snail you a copy of mine if you can't find one. It's FREE, not shareware or anything. The author, Jay Duthler, wrote it for the pleasure of teaching code.

The really keen thing about it is that it lets you set the character formation speed and the character send speed separately. This way, you can get used to the sound of characters formed at high speeds, while still having enough time to think about and write down what you heard. In this way, you can learn at five without hindering your ability to move up to 13.

I set mine on 18 wpm character speed, and move the send speed up so that it's about 2 wpm faster than I can reliably copy. With this method, I'm up to about 9 WPM reliable copy. The progress has been fantastic. I haven't had the chance to get my novice ticket yet, but only because I've been waiting for a testing session.

It's the deluxe way to learn code.

Best wishes. See you on the air soon.

--

Perry G. Ramsey                      Department of Earth and Atmospheric Sciences  
perryr@vm.cc.purdue.edu            Purdue University, W. Lafayette, IN USA  
dil@mace.cc.purdue.edu            \*\*\* IMAGINE YOUR LOGO HERE \*\*\*\*\*

Ten thousand low-lives a day read this space.

-----  
Date: 15 Mar 91 05:08:56 GMT  
From: orion.oac.uci.edu!ucivax!jarthur!elroy.jpl.nasa.gov!sdd.hp.com!  
uakari.primate.wisc.edu!caen!news.cs.indiana.edu!know!cs.utexas.edu!oakhill!  
nddsun1!waters@ucsd.edu  
To: info-hams@ucsd.edu

References <906@nddsun1.sps.mot.com>, <1991Mar11.230403.11125@xanadu.com>,  
<22243@unix.SRI.COM>.wis  
Subject : Re: Re: HF recomendations

In article <22243@unix.SRI.COM> larsen@snmp.sri.com (Alan Larson) writes:  
>In article <1991Mar11.230403.11125@xanadu.com> jeff@xanadu.com (Jeff Crilly  
N6ZFX) writes:  
>>In article <906@nddsun1.sps.mot.com> waters@nddsun1.sps.mot.com (Mike Waters)  
writes:  
>>>Don't overlook an "invisible dipole" using 22-24 gauge wire. You can  
>>>even get it with light blue covering for wire wrap work. Use rubber  
>>>bands as insulators and 1/8 inch coax.  
>>The bandwidth will be very narrow, though.  
> From having operated just such an antenna for many years, I can claim  
>that this is definitely NOT true. The bandwidth is just fine. Since  
>the resistance of the wire lowers the Q, it may even be a bit broader  
>than one made of heavy wire, but I was unable to measure that difference.  
>Mine covered 40 meters just fine.

If you look in the ARRL antenna book, the 2:1 SWR bandwidth is just fine  
on every band except 80M for wire the thickness of a human hair (weelll,  
ALMOST that thin :-). In terms of percentage bandwidth (i.e.  
width/freq.) the 40-10M ham bands are quite narrow. I doubt if you could  
build a multi band version though :-)

On 80M running LOW power (<200W RF) and with a tunable power output  
stage (antenna tuner or -ugh- tube type rigs) then even 80M should work  
just fine. Remember that SWR only MULTIPLIES losses, if the line loss is  
low to start with a 10:1 or 20:1 SWR will only cause a 5-10% loss of  
power compared to 1:1. For short runs of cable (<50 ft) even the 1/8"  
coax has quite low loss at 80M. The 1/8" cable can only handle a limited  
power though and the max power must be derated too. If the cable can  
handle 500W at 1:1 SWR, it will only handle 100W at 5:1 SWR or 50W at  
10:1 SWR. Yes I HAVE melted cable with 100W RF!

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\*Mike Waters AA4MW/7 waters@nddsun1.sps.mot.com \*  
We ARE as gods and might as well get good at it.  
-- Whole Earth Catalog

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End of Info-Hams Digest

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